

## SEQUENCE LISTING

<110> GRIFFITHS, GARY L.  
 HANSEN, HANS J.  
 GOLDENBERG, DAVID M.  
 LUNDBERG, BO B.

<120> ANTI-CD74 IMMUNOCONJUGATES AND METHODS

<130> 40923-0079US5

<140> 10/706,852

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<150> 10/314,330

<151> 2002-12-09

<150> 09/965,796

<151> 2001-10-01

<150> 09/307,816

<151> 1999-05-10

<150> 10/350,096

<151> 2003-01-24

<150> 09/590,284

<151> 2000-06-09

<150> 10/377,122

<151> 2003-03-03

<150> 60/360,259

<151> 2002-03-01

<150> 60/478,830

<151> 2003-06-17

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<170> PatentIn Ver. 3.2

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<211> 360

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<213> Mus musculus

<220>

<221> CDS

<222> (1)..(360)

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Gln	Ile	Gln	Leu	Val	Gln	Ser	Gly	Pro	Glu	Leu	Lys	Lys	Pro	Gly	Glu	
1					5				10					15		

aca gtc aag gtc acc tgc aag act tct gga tat acc ttc aca aac tat 96  
 Thr Val Lys Val Thr Cys Lys Thr Ser Gly Tyr Thr Phe Thr Asn Tyr  
                   20                                  25                                  30

gga gtg aac tgg ata aag cag act cca gga gag ggt tta cag tgg atg 144  
 Gly Val Asn Trp Ile Lys Gln Thr Pro Gly Glu Gly Leu Gln Trp Met  
                   35                                  40                                  45

ggc tgg ata aac ccc aac act gga gag cca aca ttt gat gat gac ttc 192  
 Gly Trp Ile Asn Pro Asn Thr Gly Glu Pro Thr Phe Asp Asp Asp Phe  
                   50                                  55                                  60

aag gga cga ttt gcc ttc tct ttg gaa tcc tct gcc agc act gcc ttt 240  
 Lys Gly Arg Phe Ala Phe Ser Leu Glu Ser Ser Ala Ser Thr Ala Phe  
                   65                                  70                                  75                                  80

ttg cag atc agc aac ctc aaa aat gag gac atg ggt aca tat ttc tgt 288  
 Leu Gln Ile Ser Asn Leu Lys Asn Glu Asp Met Gly Thr Tyr Phe Cys  
                                   85                                  90                                  95

tca aga tcg agg ggt aaa aac gaa gcc tgg ttt gct tat tgg ggc caa 336  
 Ser Arg Ser Arg Gly Lys Asn Glu Ala Trp Phe Ala Tyr Trp Gly Gln  
                   100                                  105                                  110

ggg act ctg gtc act gtc tct gaa 360  
 Gly Thr Leu Val Thr Val Ser Glu  
                   115                                  120

<210> 2  
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<400> 2  
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Thr Val Lys Val Thr Cys Lys Thr Ser Gly Tyr Thr Phe Thr Asn Tyr  
                   20                                  25                                  30

Gly Val Asn Trp Ile Lys Gln Thr Pro Gly Glu Gly Leu Gln Trp Met  
                   35                                  40                                  45

Gly Trp Ile Asn Pro Asn Thr Gly Glu Pro Thr Phe Asp Asp Asp Phe  
                   50                                  55                                  60

Lys Gly Arg Phe Ala Phe Ser Leu Glu Ser Ser Ala Ser Thr Ala Phe  
                   65                                  70                                  75                                  80

Leu Gln Ile Ser Asn Leu Lys Asn Glu Asp Met Gly Thr Tyr Phe Cys  
                                   85                                  90                                  95

Ser Arg Ser Arg Gly Lys Asn Glu Ala Trp Phe Ala Tyr Trp Gly Gln  
                   100                                  105                                  110

Gly Thr Leu Val Thr Val Ser Glu  
 115 120

<210> 3  
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 <212> DNA  
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<220>  
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 <222> (1)..(333)

<400> 3  
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 Asp Val Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly  
 1 5 10 15  
 gat caa gcc tcc atc tct tgc aga tct agt cag agc ctt gta cac aga 96  
 Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Arg  
 20 25 30  
 aat gga aac acc tat tta cat tgg tac ctg cag aag cca ggc cag tct 144  
 Asn Gly Asn Thr Tyr Leu His Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
 35 40 45  
 cca aag ctc ctg atc tac aca gtt tcc aac cga ttt tct ggg gtc cca 192  
 Pro Lys Leu Leu Ile Tyr Thr Val Ser Asn Arg Phe Ser Gly Val Pro  
 50 55 60  
 gac agg ttc agt ggc agt gga tca ggg aca gat ttc aca ctc aag atc 240  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
 65 70 75 80  
 agt aga gtg gag gct gag gat ctg gga ctt tat ttc tgc tct caa agt 288  
 Ser Arg Val Glu Ala Glu Asp Leu Gly Leu Tyr Phe Cys Ser Gln Ser  
 85 90 95  
 tca cat gtt cct ccc acg ttc ggt gct ggg acc aag ctg gag atc taac 337  
 Ser His Val Pro Pro Thr Phe Gly Ala Gly Thr Lys Leu Glu Ile  
 100 105 110

<210> 4  
 <211> 111  
 <212> PRT  
 <213> Mus musculus

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 20 25 30

tca aga tcg agg ggt aaa aac gaa gcc tgg ttt gct tat tgg ggc caa 336  
Ser Arg Ser Arg Gly Lys Asn Glu Ala Trp Phe Ala Tyr Trp Gly Gln  
100 105 110

ggg act ctg gtc acc gtc tcc tca  
 Gly Thr Leu Val Thr Val Ser Ser  
           115                  120

360

<210> 6  
 <211> 120  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: chimeric cLL1VH sequence

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 Thr Val Lys Val Thr Cys Lys Thr Ser Gly Tyr Thr Phe Thr Asn Tyr  
                   20                  25                  30  
 Gly Val Asn Trp Ile Lys Gln Thr Pro Gly Glu Gly Leu Gln Trp Met  
           35                  40                  45  
 Gly Trp Ile Asn Pro Asn Thr Gly Glu Pro Thr Phe Asp Asp Asp Phe  
       50                  55                  60  
 Lys Gly Arg Phe Ala Phe Ser Leu Glu Ser Ser Ala Ser Thr Ala Phe  
       65                  70                  75                  80  
 Leu Gln Ile Ser Asn Leu Lys Asn Glu Asp Met Gly Thr Tyr Phe Cys  
                   85                  90                  95  
 Ser Arg Ser Arg Gly Lys Asn Glu Ala Trp Phe Ala Tyr Trp Gly Gln  
           100                  105                  110  
 Gly Thr Leu Val Thr Val Ser Ser  
       115                  120

<210> 7  
 <211> 339  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: chimeric cLL1Vk sequence

<220>  
 <221> CDS  
 <222> (1)..(339)

<400> 7  
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 Asp Ile Gln Leu Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly  
       1                  5                  10                  15

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gat caa gcc tcc atc tct tgc aga tct agt cag agc ctt gta cac aga 96
Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Arg
          20                      25                      30

aat gga aac acc tat tta cat tgg tac ctg cag aag cca ggc cag tct 144
Asn Gly Asn Thr Tyr Leu His Trp Tyr Leu Gln Lys Pro Gly Gln Ser
          35                      40                      45

cca aag ctc ctg atc tac aca gtt tcc aac cga ttt tct ggg gtc cca 192
Pro Lys Leu Leu Ile Tyr Thr Val Ser Asn Arg Phe Ser Gly Val Pro
          50                      55                      60

gac agg ttc agt ggc agt gga tca ggg aca gat ttc aca ctc aag atc 240
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
          65                      70                      75                      80

agt aga gtg gag gct gag gat ctg gga ctt tat ttc tgc tct caa agt 288
Ser Arg Val Glu Ala Glu Asp Leu Gly Leu Tyr Phe Cys Ser Gln Ser
          85                      90                      95

tca cat gtt cct ccc acg ttc ggt gct ggg acc aag ctg gag atc aaa 336
Ser His Val Pro Pro Thr Phe Gly Ala Gly Thr Lys Leu Glu Ile Lys
          100                      105                      110

cgt 339
Arg

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<210> 8

<211> 113

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chimeric cLL1Vk sequence

<400> 8

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Asp Ile Gln Leu Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
 1                      5                      10                      15

Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Arg
          20                      25                      30

Asn Gly Asn Thr Tyr Leu His Trp Tyr Leu Gln Lys Pro Gly Gln Ser
          35                      40                      45

Pro Lys Leu Leu Ile Tyr Thr Val Ser Asn Arg Phe Ser Gly Val Pro
          50                      55                      60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
          65                      70                      75                      80

Ser Arg Val Glu Ala Glu Asp Leu Gly Leu Tyr Phe Cys Ser Gln Ser
          85                      90                      95

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Ser His Val Pro Pro Thr Phe Gly Ala Gly Thr Lys Leu Glu Ile Lys  
 100 105 110

Arg

<210> 9  
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<220>  
 <223> Description of Artificial Sequence: humanized hLL1VH sequence

<220>  
 <221> CDS  
 <222> (1)..(360)

<400> 9  
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 1 5 10 15  
 tca gtg aag gtt tcc tgc aag gct tct gga tac acc ttc act aac tat 96  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr  
 20 25 30  
 gga gtg aac tgg ata aag cag gcc cct gga caa ggg ctt cag tgg atg 144  
 Gly Val Asn Trp Ile Lys Gln Ala Pro Gly Gln Gly Leu Gln Trp Met  
 35 40 45  
 ggc tgg ata aac ccc aac act gga gag cca aca ttt gat gat gac ttc 192  
 Gly Trp Ile Asn Pro Asn Thr Gly Glu Pro Thr Phe Asp Asp Asp Phe  
 50 55 60  
 aag gga cga ttt gcc ttc tcc ttg gac acc tct gtc agc acg gca tat 240  
 Lys Gly Arg Phe Ala Phe Ser Leu Asp Thr Ser Val Ser Thr Ala Tyr  
 65 70 75 80  
 ctc cag atc agc agc cta aag gct gac gac act gcc gtg tat ttc tgt 288  
 Leu Gln Ile Ser Ser Leu Lys Ala Asp Asp Thr Ala Val Tyr Phe Cys  
 85 90 95  
 tca aga tcg agg ggt aaa aac gaa gcc tgg ttt gct tat tgg ggc caa 336  
 Ser Arg Ser Arg Gly Lys Asn Glu Ala Trp Phe Ala Tyr Trp Gly Gln  
 100 105 110  
 ggg acc ctg gtc acc gtc tcc tca 360  
 Gly Thr Leu Val Thr Val Ser Ser  
 115 120

<210> 10  
 <211> 120  
 <212> PRT  
 <213> Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: humanized hLL1VH sequence

&lt;400&gt; 10

Gln Val Gln Leu Gln Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala  
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr  
 20 25 30

Gly Val Asn Trp Ile Lys Gln Ala Pro Gly Gln Gly Leu Gln Trp Met  
 35 40 45

Gly Trp Ile Asn Pro Asn Thr Gly Glu Pro Thr Phe Asp Asp Asp Phe  
 50 55 60

Lys Gly Arg Phe Ala Phe Ser Leu Asp Thr Ser Val Ser Thr Ala Tyr  
 65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Asp Asp Thr Ala Val Tyr Phe Cys  
 85 90 95

Ser Arg Ser Arg Gly Lys Asn Glu Ala Trp Phe Ala Tyr Trp Gly Gln  
 100 105 110

Gly Thr Leu Val Thr Val Ser Ser  
 115 120

&lt;210&gt; 11

&lt;211&gt; 339

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: humanized hLL1Vk sequence

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(339)

&lt;400&gt; 11

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 Asp Ile Gln Leu Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly  
 1 5 10 15

cag ccg gcc tcc atc tcc tgc aga tca agt cag agc ctt gta cac aga 96  
 Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Arg  
 20 25 30

aat gga aac acc tat tta cat tgg ttt cag cag agg cca ggc caa tct 144  
 Asn Gly Asn Thr Tyr Leu His Trp Phe Gln Gln Arg Pro Gly Gln Ser  
 35 40 45



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cca agg ctc ctg atc tac aca gtt tcc aac cga ttt tct ggg gtc cca 192
Pro Arg Leu Leu Ile Tyr Thr Val Ser Asn Arg Phe Ser Gly Val Pro
    50                      55                      60

gac aga ttc agc ggc agt ggg tca ggc act gat ttc aca ctg aaa atc 240
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
    65                      70                      75                      80

agc agg gtg gag gct gag gat gtt ggg gtt tat ttc tgc tct caa agt 288
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Phe Cys Ser Gln Ser
                      85                      90                      95

tca cat gtt cct ccc acg ttc ggt gct ggg aca cga ctg gag atc aaa 336
Ser His Val Pro Pro Thr Phe Gly Ala Gly Thr Arg Leu Glu Ile Lys
                      100                      105                      110

cgt 339
Arg

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<210> 12
<211> 113
<212> PRT
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: humanized hLL1Vk sequence

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Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Arg
          20           25           30

Asn Gly Asn Thr Tyr Leu His Trp Phe Gln Gln Arg Pro Gly Gln Ser
          35           40           45

Pro Arg Leu Leu Ile Tyr Thr Val Ser Asn Arg Phe Ser Gly Val Pro
          50           55           60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
 65           70           75           80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Phe Cys Ser Gln Ser
          85           90           95

Ser His Val Pro Pro Thr Phe Gly Ala Gly Thr Arg Leu Glu Ile Lys
          100          105          110

Arg

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<210> 13
<211> 109
<212> PRT
<213> Homo sapiens

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&lt;400&gt; 13

Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  
 20 25 30  
 Ala Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  
 35 40 45  
 Gly Trp Ile Asn Thr Asn Thr Gly Asn Pro Thr Tyr Ala Gln Gly Phe  
 50 55 60  
 Thr Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Ser Thr Ala Tyr  
 65 70 75 80  
 Leu Gln Ile Ser Ser Leu Lys Ala Asp Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Glu Asp Ser Asn Gly Tyr Lys Ile Phe Asp Tyr  
 100 105

&lt;210&gt; 14

&lt;211&gt; 11

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 14

Trp Gly Gln Gly Ser Leu Val Thr Val Ser Ser  
 1 5 10

&lt;210&gt; 15

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 15

Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly  
 1 5 10 15  
 Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Ser  
 20 25 30  
 Asp Gly Asn Thr Tyr Leu Asn Trp Phe Gln Gln Arg Pro Gly Gln Ser  
 35 40 45  
 Pro Arg Arg Leu Ile Tyr Lys Val Ser Asn Arg Asp Ser Gly Val Pro  
 50 55 60  
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
 65 70 75 80  
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Gly  
 85 90 95

Thr His Trp Pro Phe Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile  
                   100                  105                  110

<210> 16  
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 <213> Mus musculus

<400> 16  
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       1                  5                  10                  15

<210> 17  
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 <212> PRT  
 <213> Mus musculus

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<210> 18  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 18  
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<210> 19  
 <211> 5  
 <212> PRT  
 <213> Mus musculus

<400> 19  
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       1                  5

<210> 20  
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 <212> PRT  
 <213> Mus musculus

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Gly

<210> 21

<211> 11

<212> PRT

<213> Mus musculus

<400> 21

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